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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/795,797

03/08/2004

Charles L. Gray JR.

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EXAMINER

KERSHTEYN, IGOR

ART UNIT

PAPER NUMBER

3745

MAIL DATE

DELIVERY MODE

05/14/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/795,797

Applicant(s)

GRAY, CHARLES L.

Examiner

Igor Kershteyn

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 and 20-30 is/are allowed.
- 6) ☒ Claim(s) 11-14, 16-19 and 31-33 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed 01/22/2007 have been fully considered but they are not persuasive.

Claims 1-33 are now pending. Claim 35 has been cancelled. Claims 31 and 32 are amended.

With respect to claim 11, Applicant generally states that "The point that should have been better emphasized is that, because the pins of Molly and Ebert are fixed, relative to the casings of the respective devices, and the yokes rotate on the fixed pins, if a bearing is present, it would logically be positioned between the yoke and the pin. Only in a case where the pin (or trunnion) rotates relative to the casing, would it be expected to place a bearing between the pin (or trunnion) and the wall of the aperture of the casing, as recited in claim 11."

This statement is not agreed with because claim 11 does not contain any limitations positively claiming the trunnion rotatably coupled to the aperture. Furthermore, the Examiner would like to point out that the bearing of Molly is positioned "between the trunnion and a wall of the aperture" thus making it logical placing the bearing on the trunnion that is fixed with respect to the housing.

Regarding claim 31, Applicant states that "a bearing that occupies a full 360° of circumference of a trunnion cannot also be capable of occupying less than 360°, without

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first undergoing some structural change. Thus, such language does impose a structural limitation defining the boundaries of the patent protection sought."

This statement is not agreed with because as recited in claim 31, "**the bearing** being positioned between the trunnion and the casing and **configured to occupy a portion of a circumference of the trunnion of less than 360 degrees**" which does not require the bearing to occupy a circumference of the trunnion of less than 360 degrees but only require the bearing to occupy **a portion** of the circumference of the trunnion that is less than 360 degrees.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11, and 12-14, 16, and 31-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ebert (2,931,250) in view of Molly (4,034,650).

In figures 1, 2, 4, and 4a, Ebert teaches a pump/motor comprising a yoke 72,73 configured to carry a rotatable barrel 26,27,74,75; a trunnion 28,29 coupled to the yoke 72,73 and configured to be received by an aperture (not numbered) of a pump casing 1, and a fluid channel 81,82,85,86 passing within the yoke 72,73 to the trunnion 28,29 and exiting the trunnion 28,29 via an aperture (not numbered) positioned between the two planes.

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Ebert teaches all the claimed subject matter but he doesn't teach a bearing between the trunnion and a wall of the aperture in a position defined by two parallel planes transverse to an axis of the trunnion.

Molly, in figures 7-9, teaches a pump/motor having a yoke 8, and a bearing 34 between a trunnion 33 and a wall of the aperture in a position defined by two parallel planes transverse to an axis of the trunnion 4.

Since Ebert and Molly are analogous art because they are from the same field of endeavor, that is the hydraulic bent axis piston machine art, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the machine of Ebert with the a bearing between the trunnion and a wall of the aperture as taught by Molly for the purpose of reducing friction between the trunnion and it's journal.

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ebert (2,931,250) as modified by Molly (4,034,650).

Ebert as modified by Molly teach all the claimed subject matter except that they don't teach the bearing is formed of a bronze alloy and the bearing is impregnated with lubricant. Applicant has not disclosed that having the bearing formed of a bronze alloy and the bearing impregnated with lubricant solves any stated problem or is for any particular purpose. Moreover, it appears that the bearing of Ebert as Modified by Molly, or applicant's invention, would perform equally well with the bearing formed of a bronze alloy and the bearing impregnated with lubricant.

Accordingly, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have bearing of Ebert as modified by Molly such that the bearing formed of a bronze alloy and the bearing impregnated with lubricant because such a modification would have been considered a mere design consideration which fails to patentably distinguish over Ebert as modified by Molly.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ebert (2,931,250) as modified by Molly (4,034,650).

Ebert as modified by Molly teach all the claimed subject matter except that they don't teach the bearing comprises a cage frame configured to receive needle rollers, and a plurality of needle rollers coupled to the frame. Applicant has not disclosed that having the bearing comprises a cage frame configured to receive needle rollers, and a plurality of needle rollers coupled to the frame solves any stated problem or is for any particular purpose. Moreover, it appears that the bearing of Ebert as Modified by Molly, or applicant's invention, would perform equally well with the bearing comprising a cage frame configured to receive needle rollers, and a plurality of needle rollers coupled to the frame.

Accordingly, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have bearing of Ebert as modified by Molly such that the bearing comprises a cage frame configured to receive needle rollers, and a plurality of needle rollers coupled to the frame because such a modification would

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have been considered a mere design consideration which fails to patentably distinguish over Ebert as modified by Molly.

***Allowable Subject Matter***

Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-10 and 20-30 are allowed.

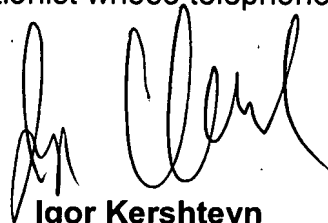
***Contact information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Kershteyn whose telephone number is **(571)272-4817**. The examiner can be reached on Monday-Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached on **(571)272-4820**. The fax number is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308 0861.

IK  
May 7, 2007



**Igor Kershteyn**  
Primary Patent examiner.  
Art Unit 3745

GOR KERSHTEYN  
PRIMARY EXAMINER